ART 34 ARROT

5

10

15

20

25

35

CLAIMS:

A method of controlling a blasting network which includes the steps of designating at least one unsafe message, placing a communication link between a control unit and the network in a control mode in which the communication link is monitored for the unsafe message, in said control mode preventing the unsafe message, when detected, from reaching the blasting network, and placing the communication link in an operational mode in which any previously designated unsafe message is allowed to reach the blasting network, and wherein in both the control mode and the operational mode any message which has not been designated as unsafe is permitted to be transmitted via the communication link.

- 10 -

- A method according to claim 1 wherein in the control mode of the communication 2.. link the or each unsafe message is prevented from reaching the blasting network by preventing the onward transmission of the unsafe message.
- 3. A method according to claim 1 wherein in the control mode of the communication link the or each unsafe message is prevented from reaching the blasting network by scrambling the of each designated unsafe message so that it is no longer unsafe.
- 4. A method according to claim 3 which includes, in the operational mode of the communication link, the steps of detecting a scrambled unsafe message, unscrambling the detected scrambled unsafe message, and transmitting the unscrambled unsafe message to the blasting network.
- 5. A method according to any one of claims 1 to 4 which includes the step of designating at least two unsafe messages.
- A method according to claim 5 wherein two designated unsafe messages are 6. respectively equated with arm and fire commands.
- A system for controlling a blasting network which includes a control unit and a 7. communication link for the network, the communication link being capable of being placed in a control mode and in an operational mode, and a monitoring device for monitoring the communication link for at least one previously designated unsafe message,

30

AMENDED SHEET **IPEA/AU**

ART 34 ARRIVE P. OPER PHP 122 76/122 class 01.5 doc-23/02/01

10

20

wherein the communication link in its control mode prevents any detected unsafe message from being transmitted to the blasting network and in its operational mode permits any previously designated unsafe message to be transmitted to the blasting network, and wherein in both its control mode and its operational mode the communication link permits any message which has not designated as unsafe to be transmitted via the communication link.

- 11 -

- 8. A control system according to claim 7 wherein in the control mode of the communication link the or each unsafe message, when detected, is ignored.
- 9. A control system according to claim 7 wherein the or each unsafe message, when detected, is scrambled.
- 10. A control system according to claim 9 wherein in the operational mode of the communication link any scrambled unsafe message is detected and unscrambled for transmission of the unscrambled unsafe message to the blasting network.
 - 11. A control system according to any one of claims 7 to 10 wherein the control unit is capable of generating legal unsafe messages, which are transmitted via the communication link in its operational mode.
 - 12. A control system according to any one of claims 7 to 11 wherein the monitoring device is a filter.
- 25 13. A control system according to any one of claims 7 to 12 wherein the communication link is placed in its control and operational modes by means of a switch.
 - 14. A blasting system including a control system according to any one of claims 7 to 13 connected to a blasting network.

(del A3)

AMENDED SHEET